

Application No.: 10/723,126

Docket No.: C02-085A



I hereby certify that this correspondence is being filed by First Class Mail to Mail Stop Appeal Brief - Patents, Commissioner of Patents, Alexandria VA 22313-1450 on

October 30, 2009
For: The Gates Corporation,
Signature [Signature]
Date signed: October 30, 2009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
Donald R. Gilbreath)	
)	Examiner: Dunwoody, Aaron M.
)	
Serial No.: 10/723,126)	
)	Group Art Unit: 3679
Docket No.: C02-085A)	
)	
For: HYDRAULIC HOSE FITTING)	
AND METHOD)	October 30, 2009

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR § 41.37(a) and (e), this brief is filed within three months of filing of the Notice of Appeal in this case on July 30, 2009, and is in furtherance of said Notice of Appeal.

The fees required under 37 CFR §§ 41.20(b)(2) and 1.136 are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF and Petition for extension of time.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

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|------|-----------------------------------|
| I. | Real Party in Interest |
| II | Related Appeals and Interferences |
| III. | Status of Claims |

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IV.	Status of Amendments
V.	Summary of Claimed Subject Matter
VI.	Grounds of Rejection to be Reviewed on Appeal
VII.	Argument
VIII.	Claims
IX.	Evidence
X.	Related Proceedings
Appendix A	Claims

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

The Gates Corporation, A Delaware Corporation, having a principal place of business in Denver, Colorado.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal. However, the Restriction Requirement first presented in a final Office Action mailed on April 4, 2006 and reiterated in a separate restriction requirement mailed on March 9, 2007 is the subject of a Petition under 37 CFR § 1.144 filed by Appellant on July 30, 2009.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 6 claims pending in application.

B. Current Status of Claims

1. Claims canceled: None
2. Claims withdrawn from consideration but not canceled: 6
3. Claims pending: 1-6
4. Claims allowed: None

5. Claims rejected: 1-5

C. Claims on Appeal

The claims on appeal are claims 1-6.

IV. STATUS OF AMENDMENTS

Appellant did not file an Amendment After Final Rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

With reference to page 3, line 21 to page 4, line 21 and Figures 1 and 2 of the present application, independent claim 1 is directed to improved hydraulic fitting 10 having stem 12 including hose insert portion A, and collar support portion B. The fitting also has a mating connection portion C and also includes collar 16, best seen in Figures 5 and 6, having torque communication portion D, a ferrule support portion E, and an inner periphery extending through the ferrule support portion and the torque communication portion.

With respect to claim 1, the improvement includes the collar support portion of the stem including knurling 24 and axial stop ring 26, which are illustrated in greater detail in Figures 3 and 4. As discussed on page 4, lines 10-13 of the specification, and best seen in Figure 2, the improvement also includes the torque communication portion of the collar being staked in such a manner that the inner periphery extending through the torque communication portion communicates with the knurling in a relatively non-rotational manner. Finally, with respect to independent claim 1, the improvement includes the ferrule support portion of the collar being staked in such a manner that the inner periphery extending through the ferrule support portion engages the axial stop ring in an axial movement limiting manner.

Again, with reference to page 3, line 21 to page 4, line 21 of the present specification and Figures 1 and 2, independent claim 2 is directed to hydraulic fitting 10 that includes stem 12 having hose insert portion A, and collar support portion B. The fitting further includes mating connection portion C. As best seen in Figures 3 and 4, the collar support portion of the stem includes knurling 24 and axial stop ring 26. Collar 16 has torque communication portion D, ferrule support portion E, and an inner periphery extending through the ferrule support portion

and the torque communication portion. As discussed in lines 10-13 of page 4 of the specification, the torque communication portion of the collar is staked such that the inner periphery extending through the torque communication portion communicates with the knurling in a relatively non-rotational manner. As also discussed, the ferrule support portion of the collar is staked such that the inner periphery extending through the ferrule support portion engages the axial stop ring in an axial movement limiting manner.

Referring again to page 3, line 21 to page 4, line 21 of the present specification and Figures 1 and 2, independent claim 4 is directed to a hydraulic coupling and hose having a hose end fitting 10 that includes stem 12 having hose insert portion A, and collar support portion B. The collar support portion of the stem includes knurling 24 and axial stop ring 26. The fitting also includes collar 16 having torque communication portion D, a ferrule support portion E, and an inner periphery extending through the ferrule support portion and the torque communication portion. As discussed in lines 10-13 of page 4 of the specification, the torque communication portion of the collar is staked such that the inner periphery extending through the torque communication portion communicates with the knurling in a relatively non-rotational manner, and the ferrule support portion of the collar is staked such that the inner periphery extending through the ferrule support portion engages the axial stop ring in an axial movement limiting manner. The fitting also includes mating connection portion C. The hose is fitted upon hose end fitting 10. The coupling also includes an apparatus fitting (not depicted, with the apparatus fitting sealingly mated to the mating connection portion of the hose end fitting.

Referring to page 3, line 21 to page 4, line 21 of the present specification, currently withdrawn independent claim 6 is directed to a method for producing hydraulic fitting 10, including the steps of providing stem 12 having hose insert portion A, and collar support portion B and knurling a portion of the collar support portion 24. Annular depression 34 is formed proximate the common boundaries of the collar support portion and the hose insert portion. Collar 16 with torque communication portion D is provided and placed about the collar support portion. The collar is staked at the torque communication portion to affix the collar upon the stem in a relatively non-rotational manner, as discussed in lines 10-13 of page 4 of the specification.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-5 are unpatentable under 35 U.S.C. § 103(a) over Huang, U.S. Pat. No. 6,318,763 (hereinafter *Huang*) in view of Salyers, U.S. Pat. No. 5,709,413 (hereinafter *Salyers*). (At the time of preparation of this Appeal Brief, claim 6 remains withdrawn from consideration, but is the subject to the aforementioned Petition under 37 CFR § 1.144.)

VII. ARGUMENT

Rejections Under 35 U.S.C. § 103

A. The combination fails to teach all elements of the claims.

Each of independent claims 1, 2 and 4 recites: “said collar support portion of said stem including knurling.”

The final Office Action relies on *Salyers* as teaching this limitation. However, Appellant notes that *Salyers* teaches the disposition of knurling 724 on a portion of insert 720 which is intended to be inserted into a tube, thus not on a collar support portion of a stem as recited by the present claims.

Each of independent claims 1, 2 and 4 also recites:

said torque communication portion of said collar staked in such a manner that said inner periphery extending through said torque communication portion communicates with said knurling in a relatively non-rotational manner; **and**

said ferrule support portion of said collar staked in such a manner that said inner periphery extending through said ferrule support portion engages said axial stop ring in an axial movement limiting manner.

The final Office Action cites Prior Art Figure 6 of *Huang* as teaching the above elements, other than the recited knurling. The final Office Action admits: “Huang teaches splines stem, but does not disclose the collar support portion including knurling.” The final Office Action goes on to assert: “Salyer teaches substituting splines (801) and knurling (724), ‘so that the tubing is effectively gripped’ (col. 7, line 46-47).”

Since, as noted above *Salyers* teaches disposition of knurling 724 on a portion of insert 720 which is intended to be inserted into a tube, *Salyers* fails to teach or suggest an inner periphery of a collar in communication with the knurling, *Salyers* teaches the knurling as being in communication with the tube into which insert 720 is inserted.

Further, Appellant respectfully points out that the final Office Action is relying on Prior Art Figure 6 of *Huang* as teaching every aspect of the above claim elements other than communication of the inner periphery of the collar with the stem knurling in a non-rotational manner. However, the final Office Action is relying on the teachings of other figures and the inventive aspect of *Huang*, which does not include the axial stop ring, to introduce the aforementioned splines, which the final Office Action replaces with teachings from *Salyers*.

Appellant respectfully asserts that Prior Art Figure 6 of *Huang* implicitly teaches away from use of *Huang*’s torque limiting feature, teeth 100 and notches 140, with any axial stop ring shown in Prior Art Figure 6. *Huang* at least fails to teach or suggest the use of an axial stop ring as arguably shown in Figure 6 together with a torque limiting structure, as recited by the present independent claims. In contrast, *Huang* teaches replacement of such an axial stop ring with complimentary teeth 100 and notches 140. Thus, by teaching supplantation of the structure shown in Prior Art Figure 6 with the structure shown in Figures 1-4, *Huang* fails to teach (and Appellant asserts, teaches away from) the use of an axial stop ring and torque limitation together.

The final Office Action argues in its “Response to Arguments” section (pages 5 and 6) that because both the background of the present application and *Huang* point out that prior art fittings, such as shown in Figure 6 of *Huang*, have collars that are free to rotate at fairly low torques, *Huang* “discloses the use of low torque limiting feature with an axial stop ring.” However, Appellant respectfully asserts that, even if this were true, *Huang* still fails to teach

“non-rotation” of the collar relative to the stem as claimed in the present independent claims (i.e. “said inner periphery extending through said torque communication portion communicates with said knurling in a relatively non-rotational manner”) in combination with limiting axial movement using an axial stop ring.

Additionally, the final Office Action states that Prior Art Figure 6 of *Huang* shows “the torque communication portion of the collar staked in such a manner that the inner periphery extending through the torque communication portion communicates in a relatively non-rotational manner.” However, *Huang* clearly states in the paragraph beginning on line 13 of column 2, that in Prior Art Figure 6 rotation of locking sleeve (54) occurs relative to connecting pipe (stem) (50) due to the weak lock between the two. Such a weak lock fails to teach or suggest non-rotation of a collar relative to a stem as claimed in the present independent claims (despite assertions to the contrary appearing in the final Office Action’s Responses to Arguments” section, pages 5 and 6).

For at least the above reasons *Huang* fails to teach or suggest “said torque communication portion of said collar staked in such a manner that said inner periphery extending through said torque communication portion communicates with said knurling in a relatively non-rotational manner” and “said ferrule support portion of said collar staked in such a manner that said inner periphery extending through said ferrule support portion engages said axial stop ring in an axial movement limiting manner,” as recited in independent claims 1, 2 and 4. *Salyers* is not relied on as teaching these elements. Thus, Appellant respectfully asserts that independent claims 1, 2 and 4 are patentable over the 35 U.S.C. § 103 rejections of record.

Claim 3 depends directly from independent claim 2 and claim 5 depends directly from independent claim 4. Thus, each of claims 3 and 5 inherit all elements of respective claims 2 and 4. Therefore, for at least the reasons advanced above in addressing the rejections of claims 2 and 4, each of claims 3 and 5 set forth features and elements not recited by the combination of *Huang* and *Salyers*. Hence, Appellant respectfully asserts that claims 3 and 5 are also patentable over the 35 U.S.C. § 103 rejections of record.

B. The Office Action does not provide a sufficient reason for combining references.

The Office Action admits that *Huang* “does not disclose the collar support portion including knurling”. The Office Action attempts to cure this deficiency by introducing *Salyers*, which the Office Action alleges to teach substituting knurling 724 for splines 801. It appears the Office Action is relying on either Rationale F or rationale G of M.P.E.P. §2141 for combining the references since it provides the following reason/motivation for making the combination:

As Salyer relates to fittings for fluidic devices, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute splines with knurling, so that the tubing is effectively gripped, as taught by Salyer.

However, since the final Office Action (and prior Office Actions) do not provide any of the other findings necessary under Rational F (design incentives or other market forces, and a finding that the variations are predictable to one of ordinary skill in the art), Appellant assumes the final Office Action intends to rely on rational G.

It is well settled that the fact that references can be combined or modified is not sufficient to establish a prima facie case of obviousness. In this case, the proposed replacement of the teeth of *Huang* with the knurling of *Salyers* would be a complete supplantation of the teachings of *Huang* and thus impermissibly change the principle of operation of *Huang*, see M.P.E.P. § 2143.01(VI).

Further, as pointed out by the Office Action *Salyers* teaches use of knurling 724 to facilitate gripping of tube 64. However, the splines of *Huang* and the knurling of the present claims are employed to communicate with a torque communication portion of a collar, or the like. Nothing in *Salyers* would suggest using knurling to grip a collar. The final Office Action is relying on *Salyers* to completely replace both the teeth 100 and the notches 140 of *Huang* with knurling and the only motivation provided, “so that the tubing is effectively gripped,” is not applicable to *Huang* or the present invention. *Huang* does not use its teeth and notches to grip a tube, nor does the present invention use its knurling to grip a tube. Thus, the advance motivation is insufficient.

The Final Office Action notes that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. However, the claimed combination cannot change the principle of operation of the primary reference or render the reference inoperable for its intended purpose. Since *Huang* relies on the meshing of, teeth 100 and notches 140 to lock locking sleeve 14 with connecting pipe 10, replacement of notches 140 (and/or teeth 100) with knurling would change the principle of operation of *Huang*.

Furthermore, *Salyers* teaches away from the combination. As pointed out by the Office Action, *Salyers* teaches the use of knurling to grip a tube, whereas in the present invention the knurling is an interface between the stem and the collar. The Response to Arguments asserts that “simply that there are differences between two references is insufficient to establish that such references ‘teach away’ from any combination thereof.” Appellant respectfully urges that this is not the standard for “teaching away” but rather that, as established in M.P.E.P. § 2141.03(IV) the prior art’s mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed. However, in this case *Huang* does not disclose “alternatives” rather *Huang* “discourages” the use of an axial stop ring as shown in Prior Art Figure 6 together with a torque limiting feature such as shown in Figures 1-4 of *Huang*.

For all the foregoing reasons, there is no motivation or other apparent reason to modify *Huang* using the teachings of *Salyers* in the manner proposed by the final Office Action. Resultantly, the rejection of claims 1-5 should be withdrawn.

Conclusion

For all the reasons given above, Appellant submits that the pending claims distinguish over the prior art under 35 U.S.C. § 103. Accordingly, Appellant submits that this application is in full condition for allowance.

VIII. CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

IX. EVIDENCE

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

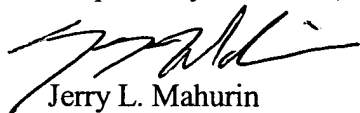
X. RELATED PROCEEDINGS

No related appeals, interferences, or judicial proceedings are referenced in II above. Therefore, no copies of decisions in related proceedings are provided, hence no Related Proceedings Appendix is included.

Dated: October 30, 2009

JLM
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Respectfully submitted,



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APPENDIX A

Claims Involved in the Appeal of Application Serial No. 10/723,126

1. An improved hydraulic fitting having a stem including a hose insert portion, and a collar support portion, having a mating connection portion, and a collar having, a torque communication portion, a ferrule support portion, and an inner periphery extending through said ferrule support portion and said torque communication portion, the improvement comprising:
 - said collar support portion of said stem including knurling and an axial stop ring,
 - said torque communication portion of said collar staked in such a manner that said inner periphery extending through said torque communication portion communicates with said knurling in a relatively non-rotational manner, and
 - said ferrule support portion of said collar staked in such a manner that said inner periphery extending through said ferrule support portion engages said axial stop ring in an axial movement limiting manner.

2. A hydraulic fitting comprising:

a stem having a hose insert portion, and a collar support portion,

a mating connection portion,

said collar support portion of said stem including knurling and an axial stop ring,

a collar having, a torque communication portion, a ferrule support portion, and an

inner periphery extending through said ferrule support portion and said torque communication portion,

said torque communication portion of said collar staked such that said inner periphery

extending through said torque communication portion communicates with said

knurling in a relatively non-rotational manner, and

said ferrule support portion of said collar staked such that said inner periphery

extending through said ferrule support portion engages said axial stop ring in an

axial movement limiting manner.

3. The hydraulic fitting of claim 2 further comprising a ferrule affixed upon said ferrule support portion.

4. A hydraulic coupling and hose comprising:

a hose end fitting including:

a stem having a hose insert portion, and a collar support portion,

said collar support portion of said stem including knurling and an axial stop ring,

a collar having, a torque communication portion, a ferrule support portion, and an

inner periphery extending through said ferrule support portion and said torque communication portion,

said torque communication portion of said collar staked such that said inner periphery

extending through said torque communication portion communicates with said knurling in a relatively non-rotational manner,

said ferrule support portion of said collar staked such that said inner periphery extending through said ferrule support portion engages said axial stop ring in an axial movement limiting manner,

a mating connection portion,

said hose fitted upon said hose end fitting,

an apparatus fitting, and

said apparatus fitting sealingly mated to said mating connection portion of said hose end fitting.

5. The hydraulic coupling and hose of claim 4 further comprising a ferrule staked upon said ferrule support portion and said hose crimped under said ferrule.

6. A method for producing a hydraulic fitting comprising the steps of:
 - providing a stem having a hose insert portion, and a collar support portion,
 - knurling a portion of said collar support portion,
 - forming an annular depression proximate the common boundaries of said collar support portion and said hose insert portion,
 - providing a collar with a torque communication portion,
 - placing said collar about said collar support portion, and
 - staking said collar at said torque communication portion to affix said collar upon said stem in a relatively non-rotational manner.